All Recommendations

Thursday, October 04, 2012 1:27:11 PM

Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR	SOE	Assigned To	Status
17490	Isomax	TKC	2012	2.1.1.1	1. Issue discussed was that there is no alarm to alert the operator that E-401s have plugged and 72PV401 has closed leading to a potential inventory management problem. Consider adding a low flow alarm trip point to the existing E-401 flow measurement 72FC405	Declined. Not a safety issue. This asset item will be managed as a regular business item					9/5/2013	8	A	Pak, Johnny	Unassigned
17494	Isomax	TKC	2012	4.1.1.1	5. Issue discussed was that there is no routine preventive maintenance to replace filter cartridge on the K-719 filter coalescer which could lead to poor furnace performance. Consider implementing a Maximo PM to change K-719 filter cartridge annually.	Declined. Not a safety issue. This asset item will be managed as a regular business item.					9/5/2013	6	A	Pak, Johnny	Unassigned
17495	Isomax	TKC	2012	4.7.1.1	6. Issue discussed was that there may or may not be a mechanical stop preventing full closure of the F-410/420 furnace stack damper. Lack of a mechanical stop could lead to an increased potential for a furnace explosion and personnel exposure/injury. Consider verifying the presence or absence of an F-410/420 furnace damper mechanical stop during the next scheduled turnaround and add information to EOM.	Consider short-term mitigation for DCS and manual operation Consider verifying the presence or absence of an F-410/420 furnace damper mechanical stop during the next scheduled turnaround and add information to EOM.					9/5/2013	6	S	Shockey, Gregory A.	Unassigned
17496	Isomax	TKC	2012	4.7.2.1	7. Issue discussed was that there may or may not be a mechanical stop preventing full closure of the F-710 furnace stack damper. Lack of a mechanical stop could lead to an increased potential for a furnace explosion and personnel exposure/injury. Consider verifying the presence or absence of an F-710 furnace damper mechanical stop during the next scheduled turnaround and add information to EOM.	Consider short-term mitigation for DCS and manual operation Consider verifying the presence or absence of an F-710 furnace damper mechanical stop during the next scheduled turnaround and add information to EOM.					9/5/2013	6	S	Shockey, Gregory A.	Unassigned

All Recommendations

Thursday, October 04, 2012 1:27:12 PM

Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR	SOE	Assigned To	Status
17497	Isomax	TKC	2012	4.12.1.1	8. Issue discussed was that the current design low Nox burners are difficult to light and require multiple attempts to successfully light all the furnace burners leading to an increased potential for operator injury. Inaddition, backburning has been a problem. Consider replacing burners with different design low Nox burner with improved lighting ability or some procedural solution.	Consider replacing burners with different design low Nox burner with improved lighting ability.					9/5/2013	6	S	Shockey, Gregory A.	Unassigned
17498	Isomax	TKC	2012	6.1.1.1	9. Issue discussed is that reactor bed 1 and overall differential pressure instrumentation is not functional which could led to internal damage and unplanned shutdown. Consider repairing/replacing differential pressure instrumentation or installing individual pressure transmitters and calculating the differential pressures in the DCS.	Declined. Not a safety issue. This asset item will be managed as a regular business item.					9/5/2013	6	A	Pak, Johnny	Unassigned
17499	Isomax	TKC	2012	6.12.1.1	10. Issue discussed was the possibility of overpressuring the offline reactor module during isolation from separation section leading to potential personnel exposure/injury. Consider installing a method of overpressure protection for the offline reactor module during startup and shutdown periods.	This recommendation meets Chevron's qualifying criteria for an Inherently Safer Systems review. Any mitigation plan addressing this recommendation and the associated consequence scenario must include an ISS review. Consider installing a method of overpressure protection for the offline reactor module during startup and shutdown periods. The resolution for this recommendation must satisfy the requirements for scenarios 6.12.1.1 and 12.12.1.1					9/5/2013	5	S	Crow, Mark A.	Unassigned

All Recommendations

Thursday, October 04, 2012 1:27:12 PM

Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR	SOE	Assigned To	Status
17500	Isomax	TKC	2012	6.12.2.1	11. Issue discussed is that the lack of an alarm to alert operator that the reactor pressure is approaching the maximum allowable pressure at a given temperature which could result in brittle fracture and personnel exposure/injury. Consider installing minimum pressurizing temperature alarm curves for reactors R-410/420, R-411/421 and E-410/420 in control system.	Consider installing minimum pressurizing temperature alarm curves for reactors R-410/420, R-411/421 and E-410/420 in control system.					9/5/2013	6	S	Garza, Frank	Unassigned
17501	Isomax	TKC	2012	6.12.3.1	12. Issue discussed is that Emergency Procedure TKC-EP-401 does not contain details on how far to de-pressure and we rely heavily on head operator knowledge and experience to avoid potential reactor temperature excursions, loss of containment and personnel exposure/injury. Consider reviewing Emergency Procedure TKC-EP-401 with BIN Team Leader and updating accordingly.	Consider reviewing Emergency Procedure TKC-EP-401 with BIN Team Leader and updating accordingly.					9/5/2013	6	S	Cuartero, Maurice	Unassigned
17502	Isomax	TKC	2012	7.1.1.1	13. Issue discussed was that one of the two (2) V-440s level transmitters is not functional. Failure of the 72LT443 could result in oil carryover from V-440 to V-450 and K-400 damage. The GWR level transmitters on V-440 have performed unreliably in this service. Consider installing at least one (1) level transmitter of a different technology than GWR on V-440 that will function reliably in this service.	Declined. Not a safety issue. This asset item will be managed as a regular business item.					9/5/2013	7	A	Pak, Johnny	Unassigned

All Recommendations

Thursday, October 04, 2012 1:27:12 PM

Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR	SOE	Assigned To	Status
17503	Isomax	TKC	2012	7.1.1.1	14. Issue discussed was that the lack of a high level override on V-440 per the Hydroprocessing BIN recommendation. Liquid carryover from V-440 could lead to K-400 damage and TKC shutdown for repair. Consider installation of Hydroprocessing BIN standard safety interlock system design for separator vessel overfill and gas out scenarios.	Declined. Not a safety issue. This asset item will be managed as a regular business item. The resolution for this recommendation must satisfy the requirements for scenarios 7.1.1.1 and 9.1.4.1					9/5/2013	7	A	Pak, Johnny	Unassigned
17504	Isomax	TKC	2012	7.2.1.1	16. Issue discussed was that all three (3) V-460 PSVs are open to the process, including the installed spare. The team discussed that "salting up" has been noted in the V-460 overhead would lead to plugging of the spare PSV which could result in loss of containment and personnel exposure/injury. Consider developing a program to ensure that overpressure protection is not compromised due to salt buildup.	Consider developing a program to ensure that overpressure protection is not compromised due to salt buildup.					9/5/2013	7	S	Shockey, Gregory A.	Unassigned
17505	Isomax	TKC	2012	7.2.1.1	17. Issue discussed was that the design basis for V-460 overpressure protection is not documented on the relief valve data sheet. Undersizing of the PSV could result in loss of containment and personnel exposure/injury. Consider reviewing V-460 relief valve IX-423/487A/B sizing calculation to confirm that it is appropriate for V-440 gas out scenario.	Consider reviewing V-460 relief valve IX-423/487A/B sizing calculation to confirm that it is appropriate for V-440 gas out scenario.					9/5/2013	7	S	Wohlgeschaffen, Ken R.	Unassigned

All Recommendations

Thursday, October 04, 2012 1:27:12 PM

Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR	SOE	Assigned To	Status
17506	Isomax	TKC	2012	7.2.1.1	15. Issue discussed was that the lack of a low level chopper on V-440 per the Hydroprocessing BIN recommendation. Gasout of V-440 could lead to overpressure of V-460 (or #4 H2S or 20 Plant) and personnel exposure/injury. Consider installation of Hydroprocessing BIN standard safety interlock system design for separator vessel overfill and gas out scenarios.	Consider installation of Hydroprocessing BIN standard safety interlock system design for separator vessel overfill and gas out scenarios. The resolution for this recommendation must satisfy the requirements for scenarios 7.2.1.1 and 9.2.3.1					9/5/2013	7	S	Wohlgeschaffen, Ken R.	Unassigned
17507	Isomax	TKC	2012	7.14.1.1	18. Issue discussed was that the GWR level transmitters on V-440 and V-450 do not function reliably. Failure of the GWR level transmitters could result in oil carryover, gassing out and flaring, leading to potential equipment damage and unplanned shutdown. Failure of the GWR level transmitters has contributed to several scorecard events in the past two years. Consider installing a replacement level transmitter of a different technology than GWR on the separators in addition to the GWR level transmitter. Consider implementing training of instrument technicians, operators, and engineers on proper GWR level intrument installation, maintenance and operations.	Declined. Not a safety issue. This asset item will be managed as a regular business item. The resolution for this recommendation must satisfy the requirements for scenarios 7.14.1.1 and 9.14.1.1					9/5/2013	5	A	Pak, Johnny	Unassigned

All Recommendations

Thursday, October 04, 2012 1:27:12 PM

Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR	SOE	Assigned To	Status
17508	Isomax	TKC	2012	8.3.1.1	19. Issue discussed is that check valves are upstream of P-455A/B min flow bypass which could allow backflow around P-455A/B; potential overpressure of V-493 and personnel exposure/injury. Reference best practice HP-007. Consider adding a high integrity stop check valve downstream of P-455A/B min flow bypass. Consider implementing a program to ensure that P-455A/B check valves are inspected and serviced at every turnaround.	Consider adding a high integrity stop check valve downstream of P-455A/B min flow bypass. Consider implementing a program to ensure that P-455A/B check valves are inspected and serviced at every turnaround.					9/5/2013	7	S	Shockey, Gregory A.	Unassigned
17509	Isomax	TKC	2012	8.12.3.1	20. Issue discussed is that the block valve on P-455A/B suction pressure transmitter 78PSLL455A/B is closed while the pump is running to prevent inadvertent low pressure shutdown trip. This defeats the low suction pressure shutdown protection for P-455A/B which could lead to delayed startup or equipment damage and unplanned shutdown. Consider implementing some method for increasing NPSH available or modifying pump to suit current suction conditions. Consider lowering the suction pressure shutdown trip point 78PSLL455A/B to allow shutdown trip to be active during normal operations	Declined. Not a safety issue. This asset item will be managed as a regular business item.					9/5/2013	6	A	Pak, Johnny	Unassigned

All Recommendations

Thursday, October 04, 2012 1:27:12 PM

Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR	SOE	Assigned To	Status
17510	Isomax	TKC	2012	9.1.4.1	21. Issue discussed was that V-450 high level shutdown of K-400 72LH4512 has been unreliable/problematic during testing. It takes several minutes at 100 PCT level to activate high level alarm and may take days to reset below 100 PCT. Malfunction of this device could result in K-400 damage and shutdown for repair. Consider revising the 72LH4512 level pot and bridle installation to improve reliability. Reference V-500 setup.	Declined. Not a safety issue. This asset item will be managed as a regular business item.					9/5/2013	6	A	Pak, Johnny	Unassigned
17511	Isomax	TKC	2012	10.3.1.1	22. Issue discussed is that the skin TIs on the quench piping may not be installed in the correct locations which could result in piping failure and potential personnel exposure/injury. Consider conducting a review of the quench piping skin TI locations and implementing any changes identified.	Potential short-term mitigation? Consider conducting a review of the quench piping skin TI locations and implementing any changes identified.					9/5/2013	6	S	Shockey, Gregory A.	Unassigned
17512	Isomax	TKC	2012	10.3.1.1	23. Issue discussed was the potential for reactor quench piping failure as a result of high skin temperature or temperature cycling under low quench flow conditions resulting in personnel exposure/injury. Consider implementing CAT controller program with low stops on quench valves.	Consider implementing CAT controller program with low stops on quench valves.					9/5/2013	6	S	Garza, Frank	Unassigned

All Recommendations

Thursday, October 04, 2012 1:27:12 PM

Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR	SOE	Assigned To	Status
17513	Isomax	TKC	2012	11.2.5.1	24. Issue discussed is that electrical power dips have occurred in the past causing spare seal oil pumps to start resulting in increased seal oil flow to K-400 and K-500 which has a potential to damage compressor seals requiring plant shutdown for repairs. Consider investigating source of electrical power dips and correct situation if possible.	Declined. Not a safety issue. This asset item will be managed as a regular business item.					9/5/2013	6	A	Pak, Johnny	Unassigned
17514	Isomax	TKC	2012	13.1.1.1	25. Issue discussed was that there is no alarm on V-470 overhead independent of 72PC460 to alert operator that pressure in the system is increasing which could lead to loss of containment and personnel exposure/injury. Consider adding a high pressure trip point to the existing E-460 Inlet pressure indicator 72PI4621	Consider adding a high pressure alarm to the existing E-460 Inlet pressure indicator 72PI4621					9/5/2013	7	S	Shockey, Gregory A.	Unassigned
17515	Isomax	TKC	2012	13.1.3.1	26. Issue discussed was that there is no alarm on V-470 independent of 72LC4702 to alert operator that water interface is high which could lead to long-term corrosion in C-710,loss of containment and personnel exposure/injury. Consider installing second level transmitter and providing high interface level alarm. Consider installing a water/oil sample station on V-470 oil outlet to measure the amount of water in the oil.	Consider installing second level transmitter and providing high interface level alarm. Consider installing a water/oil sample station on V-470 oil outlet to measure the amount of water in the oil.					9/5/2013	5	S	Shockey, Gregory A.	Unassigned

All Recommendations

Thursday, October 04, 2012 1:27:12 PM

Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR	SOE	Assigned To	Status
17516	Isomax	TKC	2012	14.2.3.1	27. Issued discussed was that water and chlorides from V-717 are carried over into C-710 because V-717 is not designed to accommodate water from E-714 and 20 Plant blowdown which could lead to corrosion in C-710, loss of containment and personnel exposure/injury. Consider replacing V-717 with 3 phase separator or routing V-717 oil outlet to a 3 phase separator.	This recommendation meets Chevron's qualifying criteria for an Inherently Safer Systems review. Any mitigation plan addressing this recommendation and the associated consequence scenario must include an ISS review. Consider replacing V-717 with 3 phase separator or routing V-717 oil outlet to a 3 phase separator					9/5/2013	6	S	Crow, Mark A.	Unassigned
17517	Isomax	TKC	2012	18.1.2.1	28. Issue discussed was that there is no alarm independent of 72LC714 to alert the operator of loss of C-711 level leading to potential pump seal failure, LOC, personnel exposure/injury. Consider installing second level transmitter on C-711 to provide independent low level alarm.	This recommendation meets Chevron's qualifying criteria for an Inherently Safer Systems review. Any mitigation plan addressing this recommendation and the associated consequence scenario must include an ISS review. Consider installing second level transmitter on C-711 to provide independent low level alarm.					9/5/2013	6	S	Crow, Mark A.	Unassigned
17518	Isomax	TKC	2012	19.16.1.2	29. Issue discussed is that C-710 is operating outside of its recommended process conditions and has experienced overhead piping/exchanger failures (one each) within the past 5 years. This could lead to a TKC unplanned shutdown. Consider modifying overhead equipment so that the operating temperature is higher than the sublimation temperature. Refer to the C-710 Overhead Reliability Project.	Declined. Not a safety issue. This asset item will be managed as a regular business item.					9/5/2013	4	A	Pak, Johnny	Unassigned

All Recommendations

Thursday, October 04, 2012 1:27:12 PM

Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR	SOE	Assigned To	Status
17519	Isomax	TKC	2012	20.1.8.1	30. Issue discussed was that reduced wash water flow due to plugging filters can result in accelerated corrosion in fin fans E-711A-D which could lead to loss of containment and personnel exposure/injury.. Consider creating a CPV on 73FV7125 output at 80 PCT to alert PED of filter plugging and document corrective action(s).	This recommendation meets Chevron's qualifying criteria for an Inherently Safer Systems review. Any mitigation plan addressing this recommendation and the associated consequence scenario must include an ISS review. Consider creating a CPV on 73FV7125 output at 80 PCT to alert PED of filter plugging and document corrective action(s).					9/5/2013	6	S	Crow, Mark A.	Unassigned
17520	Isomax	TKC	2012	20.16.1.2	31. Issue discussed is that E-711A-D is operating outside of its recommended process conditions and has experienced a bundle failure within the past year. This could lead to a TKC unplanned shutdown. Consider modifying E-711A-D design to prevent ammonium chloride corrosion. Refer to the C-710 Overhead Reliability Project.	Declined. Not a safety issue. This asset item will be managed as a regular business item.					9/5/2013	4	A	Pak, Johnny	Unassigned
17521	Isomax	TKC	2012	21.1.1.1	32. Issue discussed was that the E-711A-D fin fan block valves have been installed between V-714 and the overpressure protection IX-710/7125A on V-710 which could lead to loss of containment and personnel exposure/injury. Consider chain locking E-711A-D fin fan block valves in the open position and add these valves to the Routine Duty 8012 TKC PSV and Relief Chain Lock Checklist.	Consider chain locking E-711A-D fin fan block valves on the in-setrvice fin-fans in the open position and add these valves to the Routine Duty 8012 TKC PSV and Relief Chain Lock Checklist. The resolution for this recommendation must satisfy the requirements for scenarios 21.1.1.1; 22.1.1.1; 22.1.1.1; and 22.3.1.1					9/5/2013	7	S	Hulse, Benjamin	Unassigned

All Recommendations

Thursday, October 04, 2012 1:27:12 PM

Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR	SOE	Assigned To	Status
17522	Isomax	TKC	2012	24.5.1.1	33. Issue discussed was identification of minor errors on P&IDs. Consider updating P&IDs per PHA redlines. Non-Risk Ranked Actionable Item required to meet regulatory/statutory requirements and/or to be consistent with Chevron's guiding principles.	Consider updating P&IDs per PHA redlines.					9/5/2013			Hulse, Benjamin	Unassigned
17523	Isomax	TKC	2012	24.9.1.1	34. (Latent Condition Review recommendation) The remote shutdown switches for the TKC reactor modules in the old control rooms are grouped together, but are separate from each other. TKC and TKN compressors and associated utilities are adjacent to one another and numbered similarly. There is the potential to inadvertently operate (start/stop, open/close) the wrong piece of equipment. This has happened within the last 5 years. Consider implementing radio communication protocol for verification of appropriate equipment by/between inside/outside operators to prevent misoperation of equipment. This could be training, steps or warning in procedures, etc. Non-Risk Ranked Actionable Item required to meet regulatory/statutory requirements and/or to be consistent with Chevron's guiding principles.	Consider implementing radio communication protocol for verification of appropriate equipment by/between inside/outside operators to prevent misoperation of equipment. This could be training, steps or warning in procedures, etc.					9/5/2013			Shockey, Gregory A.	Unassigned

All Recommendations

Thursday, October 04, 2012 1:27:12 PM

Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR	SOE	Assigned To	Status
17524	Isomax	TKC	2012	24.14.1.1	35. Issue discussed was piping specification break review. Consider reviewing the piping specification breaks associated with the TKC plant equipment to ensure appropriateness for service. Correct P&IDs as needed. Make corrections in field as needed. Non-Risk Ranked Actionable Item required to meet regulatory/statutory requirements and/or to be consistent with Chevron's guiding principles.	Consider reviewing the piping specification breaks associated with the TKC plant equipment to ensure appropriateness for service. Correct P&IDs as needed. Make corrections in field as needed.					9/5/2013			Hulse, Benjamin	Unassigned
17525	Isomax	TKC	2012	24.15.1.1	36. The team discussed deadlegs in the TKC plant piping systems and the potential for increased corrosion rates leading to a loss of containment and personnel exposure. The list of deadlegs with marked-up P&IDs can be found on the refinery server. Consider conducting a review of the deadlegs identified in this PHA and establish an inspection program as indicated by the review. Non-Risk Ranked Actionable Item required to meet regulatory/statutory requirements and/or to be consistent with Chevron's guiding principles.	Consider conducting a review of the deadlegs identified in this PHA and establish an inspection program as indicated by the review.					9/5/2013			Curtis, Scott	Unassigned

All Recommendations

Thursday, October 04, 2012 1:27:12 PM

Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR	SOE	Assigned To	Status
17529	Isomax	TKC	2012	3.1.4.1	2. Issue discussed was the potential for loss of containment if P-401/B discharge was blocked leading to possible personnel exposure/injury. Consider evaluating the pressures, temperatures and hydrogen partial pressures in the P-401/B discharge piping system, including recycle and make-up hydrogen, to determine the suitability of the piping components for the potential blocked-in scenario.	Consider evaluating the pressures, temperatures and hydrogen partial pressures in the P-401/B discharge piping system, including recycle and make-up hydrogen, to determine the suitability of the piping components for the potential blocked-in scenario.					9/5/2013	7	S	Hulse, Benjamin	Unassigned
17530	Isomax	TKC	2012	3.3.1.1	3. Issue discussed was that the current P-401/B backflow prevention is not consistent with the hydroprocessing BIN recommendations which could result in a higher potential for personnel exposure/injury. Consider installing a high integrity stop check valve in the P-401/B discharge line downstream of minimum flow bypass connection. Consider implementing a program to assure that P-401/B check valves are inspected and serviced at every turnaround.	Consider installing a high integrity stop check valve in the P-401/B discharge line downstream of minimum flow bypass connection Consider implementing a program to assure that P-401/B check valves are inspected and serviced at every turnaround.					9/5/2013	7	S	Shockey, Gregory A.	Unassigned
17531	Isomax	TKC	2012	3.16.1.1	4. Issue discussed is that the F-410/420 furnace tubes flex during normal operations and may result in broken anchor bolts (this has happened in the past) which could potentially result in tube failure and personnel exposure/injury. Consider inspecting F-410 and F-420 tubes at next planned shutdown for structural integrity and develop applicable long term monitoring plan.	Consider inspecting F-410 and F-420 tubes at next planned shutdown for structural integrity and develop applicable long term monitoring plan.					9/5/2013	6	S	Shockey, Gregory A.	Unassigned

Totals: 36 Records